

L 27540-66 EWT(1)/T WR
ACC NO. AP6007514

SOURCE CODE: UR/0109/66/011/002/0342/0345

AUTHOR: Braude, B. V.; Petrus'kin, V. Yu.; Yessentian, N. A.

47
B

ORG: none

TITLE: Calculation of beam transmission lines

SOURCE: Radiotekhnika i elektronika, v. 11, no. 2, 1966, 342-345

TOPIC TAGS: beam waveguide, light pipe, electromagnetic wave, antennas

ABSTRACT: The propagation of electromagnetic waves in beam lines is described in terms of the theory of focused antennas; in the pencil-beam antennas, the focusing is intended for Fresnel region tuning; in the beam guides, the focusing is used for ensuring small diffraction losses. The guide is regarded as a series of focused antennas, the first half-lens focusing the wave on the second half-lens, and the latter compensating the quadratic phase errors that arise near the center of the converging beam. A formula for the amplitude distribution over the cross-section of the second lens is developed. Estimated diffraction losses in the lens line are: between the first and the second lenses, 0.056 db; for intermediate lenses, 0.0122 db per lens; in the receiving horn, 0.18 db. The 0.0122-db-loss per lens is much smaller than that estimated (0.035 db) by J. R. Christian and G. Goubau (IRE Trans., 1961, AP-9, 3, 256). Orig. art. has: 5 figures and 9 formulas.

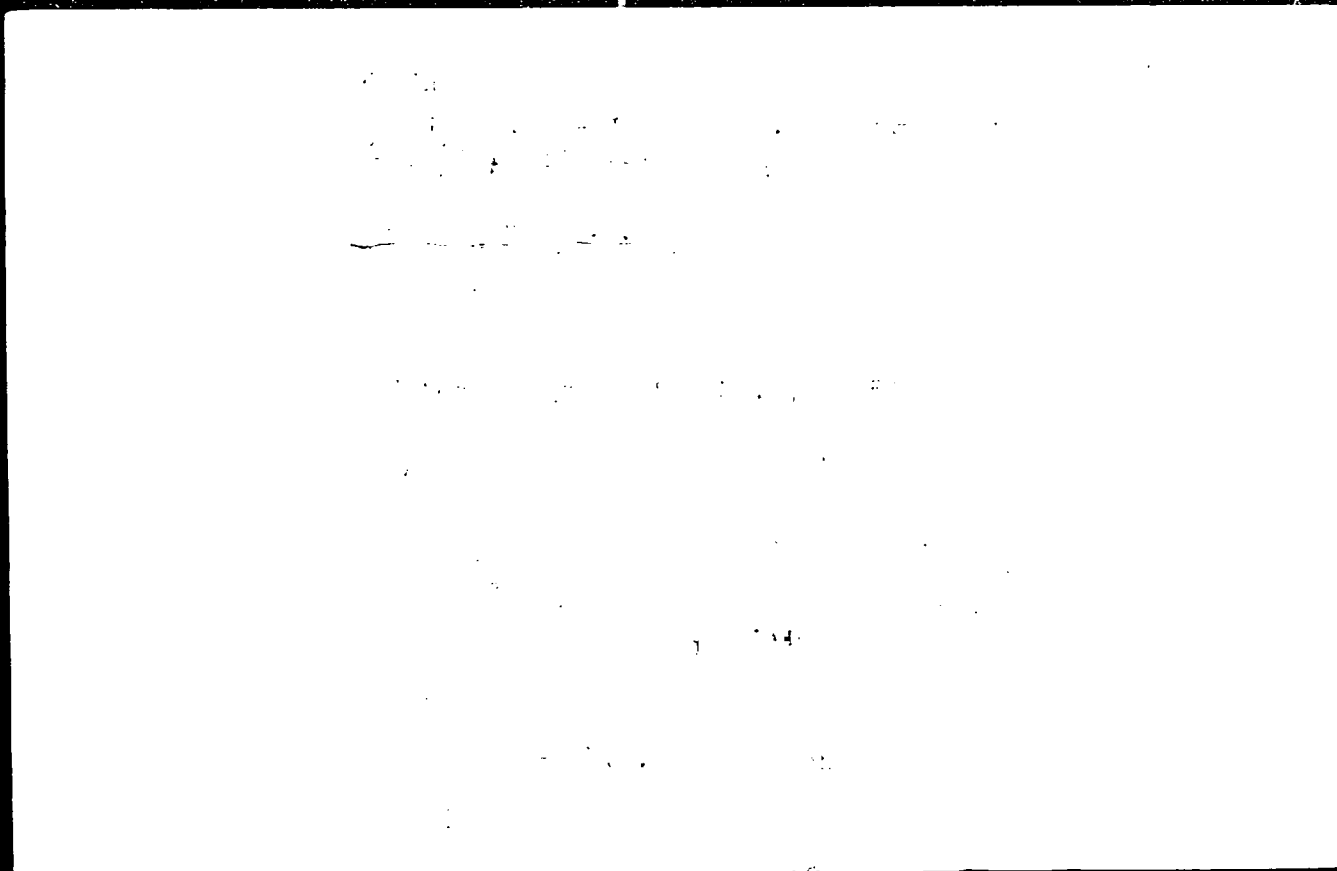
SUB CODE: 20, 09 / SUBM DATE: 12Apr65 / ORIG REF: 003 / OTH REF: 004

UDC: 621.396.679.433.001.24

Cord 1/1 BLS

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CIA-RDP86-00513R001240620016-9



APPROVED FOR RELEASE: 06/15/2000

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LUGANSKIY, N.I., prof., red.; PETRUN'KIN, V.Ye., kand.khim.nauk, red.;
RODIONOV, P.V., prof., red.; CHERKES, A.I., prof., red.;
LOKHMATYY, Yu.G., tekhnicheskiiy red.

[Thiol compounds in medicine; proceedings of a conference at
Kiev, December 16-19, 1957] Tiolovye soedineniya v meditsine;
trudy nauchnoi konferentsii, Kiev, 16-19 dekabria 1957 goda.
Kiev, Gos.med.izd-vo USSR, 1959. 286 p. (MIRA 13:4)

1. Ukrainskiy nauchno-issledovatel'skiy sanitarno-khimicheskiiy
institut. 2. Chlen-korrespondent AMN SSSR (for Cherkas).
(THIOLS--THERAPEUTIC USE)

PETRUN'KIN, V.Ye.; LYSSENKO, N.M.

Synthesis and properties dimercapto derivatives of alkanesulfonic acids. Part 5: Sodium 1,3-dimercapto-2-propanesulfonate. Zhur.ob.khim. 29 no.1:309-313 Ja '59. (MIRA 12:4)

1. Ukrainskiy nauchno-issledovatel'skiy sanitarno-khimicheskiy institut.

(Propanesulfonic acid)

PETRUN'KIN, V.Ye.

Synthesis and properties of dimercanto derivatives of alkanesulfonic acids. Part 3. S-metal derivatives of sodium 2,3-dimercaptopropane-sulfonate (Unithiol). Ukr.khim.zhur. 22 no.6:787-790 '56. (NRA 10:7)

1. Ukrainskiy nauchno-issledovatel'skiy sanitarno-khimicheskiy institut

(Sodium) (Propanesulfonic acid)

PERUNOV V.Ye.; LYSENKO A.

Synthesis and properties of disulfanto derivatives of α -ketoacids.
 acids. Part 4. Sodium 2-(β -(α -thiomethylthio)-propanesulfonate
 and sodium 3-(β -(α -thiomethylthio)-propanesulfonate).
 Ukr.khim.zhur. 22 no. 6 1975 56. (1975 1975)

Ukrainskiy nauchno-issledovatel'skiy tsentr khimicheskoy
 institut.

(Sodium) (Sulfonic acid)

PETRUNKIN, V.Yu.

Approximate diffraction formula. Trudy LPI no.181:75-77 '55
(Electric waves--Diffraction) (MLRA 10:1)

L 40973-66 FBD/WT(1)/T GW/WS-2/MR

ACC NR: AP6027241

SOURCE CODE: UR/0109/66/011/008/1499/1103

AUTHOR: Braude, B. V.; Yesepkina, N. A.; Petrun'kin, V. Yu.; Khaykin, S. E.
Umetskiy, V. N.

ORG: none

TITLE: Application of methods for correction of the surfaces of optical
telescopes to tuning of highly directional radio telescopes

SOURCE: Radiotekhnika i elektronika, v. 11, no. 8, 1966, 1499-1503

TOPIC TAGS: antenna, radio telescope antenna, antenna modulation, antenna tuning,
radio telescope

ABSTRACT: A modified version of the so-called shadow method of tuning is proposed. The shadow method in its original form is used for correcting the surface of optical reflectors, but it does not assure the required accuracy and reliability when applied to large, highly directional radio telescopes. The modification consists of providing ways of producing converging waves near the antenna and of localizing errors on the mirror surface. The principles of localizing surface errors and of determining the shape of the reflecting antenna surface, based on the modulation of signals reflected from various sections of the antenna, are briefly described. In this

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ACC NR: AP6027241

procedure (see Fig. 1) the reflecting surface is made of comparatively small movable (adjustable) elements. One or more slightly directional modulated reradiators

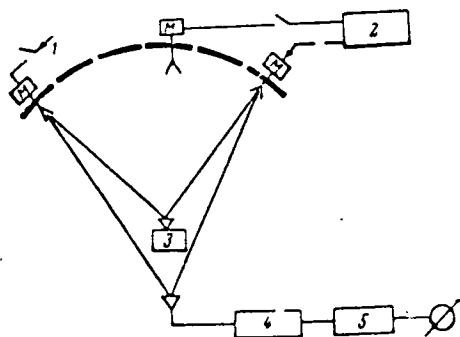


Fig. 1. Shadow method tuning arrangement

1 - From generation of Ω -frequency signals;
2 - Ω -frequency modulating generator;
3 - ω -frequency signal generator; 4 - detector; 5 - Ω -frequency signal amplifier.

(small dielectric or slot antennas with shf modulators) are mounted on each element. A generator is placed at one of the antenna focal points and a receiver with a detector and filter tuned to frequency Ω at the other. With such an arrangement, equal paths are obtained between the first and the second focal points. The modulated signal is produced by one of the reradiators, and a reference signal is produced by the sum field reflected from all of the antenna elements. Phase measurements with an accuracy of 0.5° at $\lambda = 3$ cm were made by the modulation method under laboratory conditions. In general, the tuning of a highly directional radio telescope should

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ACC NR: AP6027241

proceed as follows: 1) the antenna is first focused for a short distance to obtain a converging wave front; 2) the reflector surface is then checked and corrected by the modulation method; 3) the antenna radiation pattern is checked by placing a generator at one focal point and measuring the field distribution near the other focal point. The distribution should coincide with the antenna radiation pattern in the far zone. When the measured antenna radiation pattern (field distribution near the focal point) is found to be in good agreement with the calculated one, the antenna should be focused to infinity, i. e., a plane wave should be obtained from the radio telescope. The operation of the system is then checked against cosmic radio sources having small (compared to the width of the radiation pattern) angular dimensions. Orig. art. has: 2 figures and 8 formulas.

SUB CODE: 17, 09 SUBM DATE: 18Dec65/ ORIG REF: 006/ OTH REF: 001/ ATD PRESS: 5055

Cord 3/3 M/LP

BRAUDE, B.V.; PETRUN'KIN, V. Yu.; YESEPKINA, N.A.

Design of beam transmission lines. Radiotekh. i elektron. 11
no. 2:342-345 F '66 (MIRA 19 : 2)

1. Submitted April 12, 1965.

PETRUN'KIN, V.Yu.

Current distribution on a conducting surface under the influence
of an electromagnetic field. Trudy LPI no.181:78-83 '85.
(Radio--Antennas) (MIRA 10:1)

PETRUN'KIN, V.Yu.; MOLOTKOV, V.I.; PAKHOMOV, L.N.; PELLIKAN, S.G.

Low-power ferrite-equipped magnetic amplifiers for audio frequencies.
Trudy LPI no.194:69-74 ' 58. (MIRA 11:11)
(Magnetic amplifiers)

GLEBOV, Fedor Matveyevich [Hliebov, F.M.]; SHCHERBAKOV, Ivan Andreyevich
[deceased]; RASPEGINA, Praskov'ya Vladimirovna [Rast'ohina, P.V.];
PETRUH'KIN, V.Yu., red.; GITSHEYN, A.D., tekhnred.

[Manual of qualitative chemical semimicroanalysis] Posibnyk
z iakianoho khimichnoho nspivmikroanalizu. Kyiv, Derzh.medychne
vyd-vo URSS, 1959. 203 p. (MIRA 14:2)
(Chemistry, Analytical—Qualitative)

YERSEPKINA, N.A.; LITVINIKH, V.Ye.; FOMIN, S.G.; KOSKIN, V.M.;
VASIL'YEV, B.M.

Space harmonics of the antenna pattern of the "ARPA" radio relay
telescope. Izv. Vuzov. Radiofizika, 1974, 17, No. 1, 11-14.

(MIRA 17:1)

PETROVICH, V.Ya.; YAKOVLEV, N.A.; KURCHENKO, V.V.; KURCHENKO, V.V.

Effect of rotation of the principal cross sections of the
directivity diagram of an antenna with a variable-profile
reflector. Izv. Vuzov. 3 no.3:160-161 1974.

Q1111 1974

L 21285-66 EWT(1)/1 WR

ACC NR: AT6004855

SOURCE CODE: UR/2563/65/000/255/0067/0069

AUTHOR: Yesepkina, N. A.; Pavlov, B. Ya.; Petrin'kin, V. Yu.

ORG: none

TITLE: Strip power dividers

SOURCE: Leningrad, Politekhnikheskiy institut. Trudy, no. 255, 1965. Radioelektronika (Radio electronics), 67-69

TOPIC TAGS: power divider, strip transmission line, microstrip

ABSTRACT: Strip-type exponential power dividers intended for supplying r-f power to multielement antennas are briefly described. Ratios l/λ for various w_2/w_1 and TW ratios are tabulated; here l is the exponential-conductor length, λ is the wavelength, w_2 and w_1 are the terminal impedances of the divider. Curves of amplitude distribution over the output cables and of TW ratio within 500—700 Mc are presented. The above divider has been for division ratios up to 20. For higher ratios, a combination of ten strip exponential dividers arranged circularly and a strip (or coaxial) transformer is suggested. Orig. art. has: 4 figures, 1 formula, and 1 table. [03]

SUB CODE: 09/ SUBM DATE: none/ OTH REF: 002/ ATD PRESS: 42/8

Cord 1/1 dha

ACC NR: AP7001312

SOURCE CODE: UR/0057/66/036/012/2171/2174

AUTHOR: Bonch-Bruyevich, A. M.; Petrun'kin, V. Yu.; Arzumanov, V. N.; Yesepkina, N. A.; Imas, Ya. A.; Kruzhalov, S. V.; Pakhomov, L. N.; Chernov, V. A.

ORG: none

TITLE: A study of a neodymium glass laser with external feedback

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 12, 1966, 2171-2174

TOPIC TAGS: solid state laser, glass laser, neodymium glass laser, traveling wave laser, laser r and d

ABSTRACT: A study was made of a traveling-wave external-feedback neodymium glass laser, the experimental setup of which is shown in Fig. 1. The external cavity consisted of four mirrors arranged in a rectangular pattern (1.5 x 0.5 m). The output mirror (5') was 80% reflective and the three other mirrors were 99% reflective. The active medium was a cylindrical glass rod 240 mm long and 25 mm in diameter. The laser was pumped by two IFK-15,000 flashlamps fed from a condenser bank having a total stored energy of 30 kJ. A Faraday-effect cell, consisting of a quartz plate and a polarizer (six plane-parallel Brewster-angle plates) was used to achieve traveling-wave operation. A DFS-8 spectrograph (dispersion 6 Å/mm) and a Fabry-Perot interferometer were used to observe the emission spectra of the laser at various pumping levels and with the Faraday cell in and out of the feedback circuit. It was shown that the emission spectra of traveling-wave lasers are virtually line spectra and

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ACC NR: AP7001312

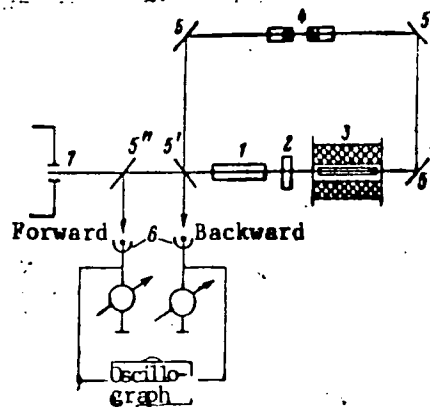


Fig. 1. Experimental setup of a traveling-wave laser

- 1 - Working substance; 2 - quartz plate;
- 3 - Faraday cell; 4 - polarizer;
- 5 - 5'' - mirrors; 6 - photocells;
- 7 - spectrograph slit.

that the spiking sequence is better ordered than that of standing-wave lasers. A reduction of the spectrum to a single narrow line, which has been observed in traveling-wave ruby lasers, was not encountered in the present laser. Such narrowing in the traveling-wave operation will not occur unless the luminescence line of the working substance broadens, as it does in rubies. The high-intensity lines observed in the experiments corresponded to the uniform broadening of luminescence lines of the dopant. Orig. art. has: 5 figures. [YK]

SUB CODE: 20/ SUBM DATE: 01Jun66/ OTH REF: 003/ ATD PRESS: 5110

Card 2/2

ACC NR: AP7002676

SOURCE CODE: UR/0109/67/012/001/0146/0149

AUTHOR: Petrun'kin, V. Yu.; Yesepkina, M. A.; Krushalov, S. V.; Pakhomov, L. N.; Chernov, V. A.

ORG: none

TITLE: Formation of the traveling wave in a complex optical resonator

SOURCE: Radiotekhnika i elektronika, v. 12, no. 1, 1967, 146-149

TOPIC TAGS: laser, ring laser, traveling wave, ~~laser, traveling wave ring laser~~
resonator, opt resonator

ABSTRACT: An analysis is made of a method for calculating a ring resonator with supplementary external mirrors to obtain traveling wave excitation. The method is based on the theory of long lines as applied to the analysis of conditions for natural oscillation of the system. The essential part of the external arrangement is a system of two mirrors: one, with a partial transmission, is inclined to the beam, and the other, which is fully reflecting, is placed perpendicularly to the beam. A system of equations is given for the wave amplitudes as functions of the distance between the mirrors and their transmission and reflective indexes. The scattering matrix of the system is determined relative to the complex wave number, the real and imaginary parts of which represent, respectively, the natural frequency and the attenuation factors. The problem is solved for certain special cases, and from these solutions the relationship between the wave number and the parameters of the entire system (expressed

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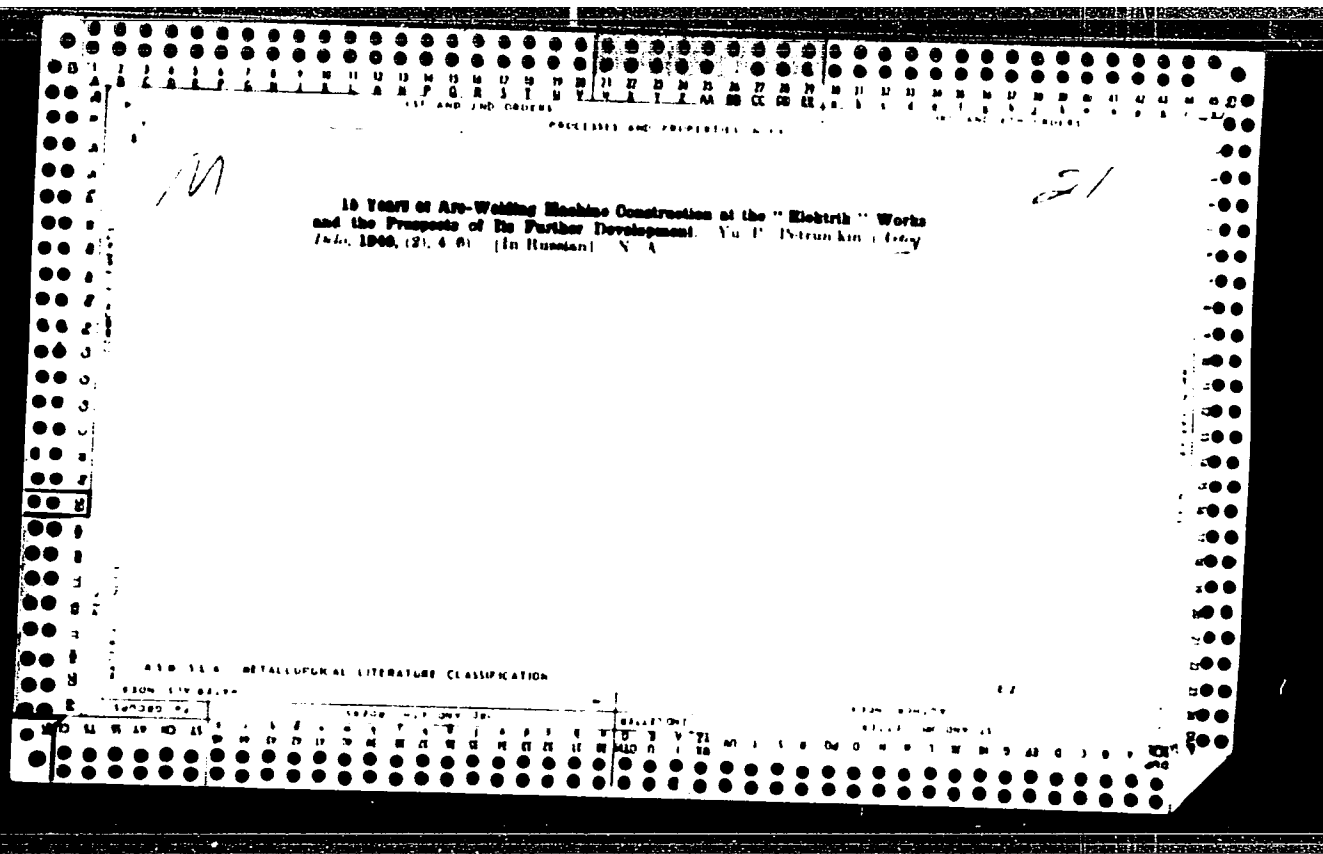
UDC: 621.372.4.029.67

ACC NR: AP7002676

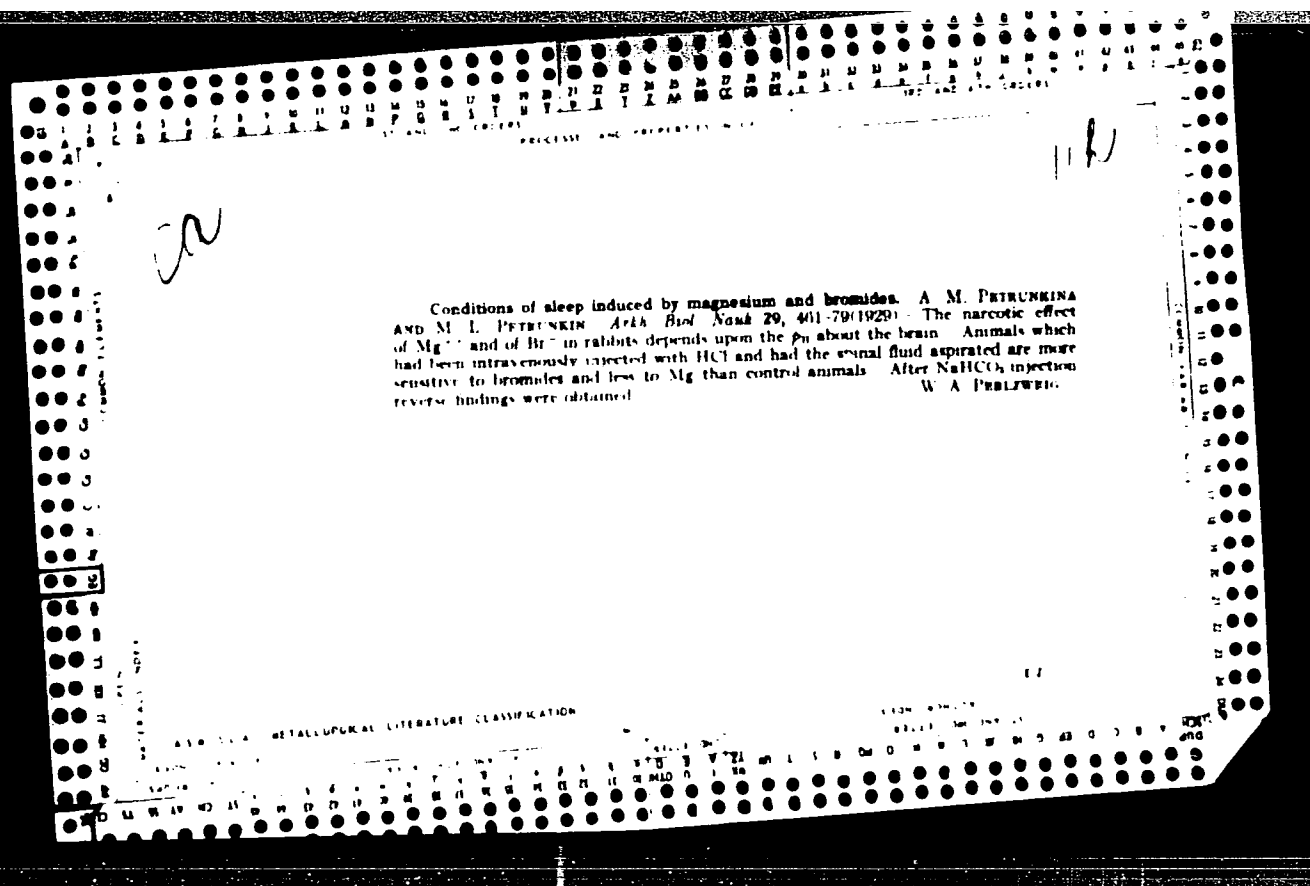
through a constant) can be deduced. Generally, however, the unavoidable reflection from the end facer of the resonator produces a reverse wave which must be eliminated before the operating traveling wave can travel only in one direction. This can be achieved either by coatings or by causing the reflected beams to deviate from the resonator axis and thus be ousted from the system. A rectangular ring laser, with near-optimal parameters, equipped with two supplementary mirrors as described, and with the end reflection eliminated by inclination of the active medium with respect to the resonator optical axis, was experimentally investigated under actual traveling-wave operation. Orig. art. has: 3 figures and 10 formulas. [WA-14]

SUB CODE: 20/ SUBM DATE: 29Jun66/ ORIG REF: 001/ OTH REF: 002/

Cord 2/2

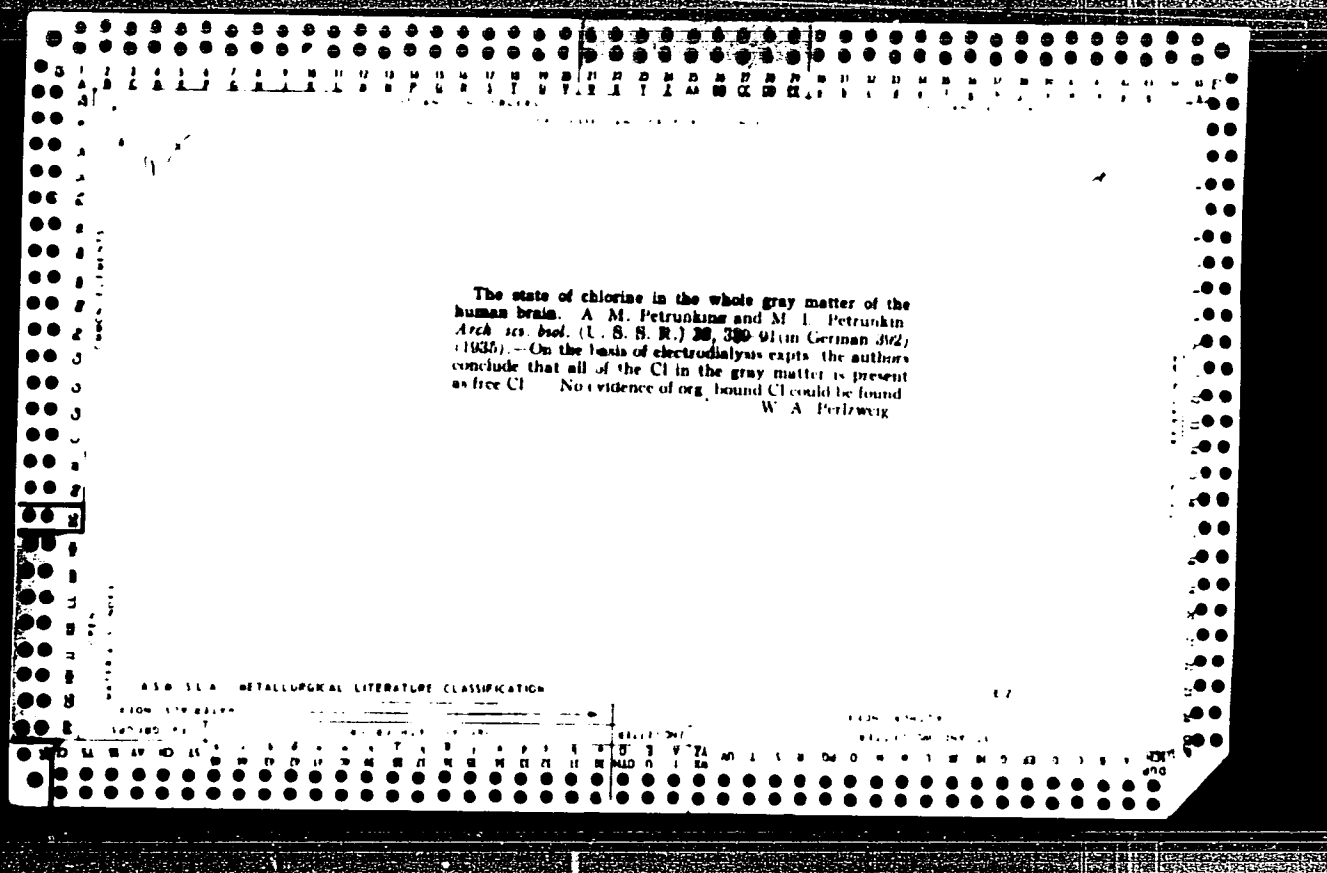


W. H. A. LADY, (Am. sci. Biol. 10, 1945, 34,
403-406)



The mineral composition of the gray matter of human brain. L. M. Georgievskaya, A. M. Petrunina and M. L. Petrunin. *Arch. int. med.* (U.S.S.R.) 30, 383-6 (in German 387) (1935).—The following figures are given on the basis of 11 analyses, in g. per 1000 g. fresh brain substance: H₂O 850.2-858.3, Cl 1.32-2.1, K 3.20-4.10, Na 0.97-1.64, Ca 0.08-0.113 and Mg 0.008-0.016. The mineral composition of the gray matter of schizophrenic patients. *Ibid.* 30, 402 (in German 402). The figures fell within the normal ranges given above.

W. A. Perlman



ca

12

The mineral content of the blood in neurotic patients
Petrunkina, E. Minker Bogdanova, Yu. Pavlovskii
and N. Pivovarskaya. *Arch. sci. Biol.* (U.S.S.R.) 40
No. 19 in English, 219-220 (1966). The serum Na, K,
Ca, Mg, phosphate and Cl figures of the China are analyzed
with the following conclusions: The mineral content in the
blood of neurotic patients, as a group and individually,
varies more widely than in normal individuals. In the
group of inhibitory neuroses the serum Na appears to be
decreased below the normal range. The relationship be-
tween the Na and the Cl contents is apparently an inverse
rather than a parallel one in different groups of neurotic
patients. The Ca/Mg ratio is diminished in the inhibi-
tory groups, and the ratios of the other ions differs from
such ratios in normal subjects. W. A. Perlwitz

no

17

The blood sugar in neurotic patients. A. Petukhina
and I. Minkov-Bogdanova. *Arch. int. Med.* U.S.S.R. 40: 21-24, English 22, 1960. The fasting blood
sugar in various types of neurotic patients varies within
wider limits than that of normal individuals. The most
marked deviation from the normal in blood-sugar curves
of neurotic patients was an unfinished (bight type of curve
after the ingestion of sugar. Hypoglycemic clon-
ges were also frequently observed. The variability
of the blood-sugar curve carried out at different times on
the same individual patient also showed greater variability
than on normal persons. W. A. Berlincow

ca

PROCESSED AND REPRODUCED FROM

Acid-base balance in the blood serum of normal human subjects. A. M. Petrun'kina, M. L. Petrun'kin, L. M. Georgievskaya and P. A. Kozlova. Arch. sci. biol. 1. S. S. R. 45, No. 2, 69-79 (in French No. 2) (1937). The cations (Na, K, Ca, Mg) and anions (Cl, HCO₃, PO₄, protein, org. acids) and ρ_{H^+} were detd. separately in the blood serum of 20 normal subjects (14 men and 6 women, 18-72 years old) under basal conditions. The data confirm those in recent American literature. Sex and age of subjects did not show any significant variations in the data. W. A. Perlzweig

ASB 35A - METALLURGICAL LITERATURE - ASSIMILATION

PETHUN'KINA, A.M.; DMITRIYEVA, S.A.

Excretion of nicotinic acid in diseases of the nervous system and in normal conditions. Zh. nevropat. psikhiat., Moskva 53 no.10:796-798 Oct 1953. (CLML 25:4)

1. Laboratory of the Biochemistry of Nutrition and Digestion of the Institute of Physiology I.P. Pavlov of the Academy of Sciences USSR.

DMITRIYEVA, S.A.; GAKKEL', L.B.; PETRUN'KINA, A.M.

Phosphopyridine nucleotide content of blood in neuroses and in organic diseases of the nervous system. Zhur.nevr. i psikh. 55 no.7:501-504 '55. (MLRA 8:10)

1. Laboratoriya biokhimi i pitaniya i pishchevareniya (zav.prof. A.M. Petrun'kina) i sektor nervnykh bolezney (zav.prof. B.N. Birman) Instituta fiziologii imeni I.P.Pavlova AN SSSR.

(NERVOUS SYSTEM, diseases,

blood phosphopyridine nucleotide in)

(NEUROSES, blood in,

phosphopyridine nucleotide)

(BLOOD,

phosphopyridine nucleotide)

(COENZYMES,

phosphopyridine nucleotide in blood in neuroses & dis. of nervous system)

USSR/Human and Animal Physiology - Metabolism.

T-2

Abs Jour : Ref Zhur - Biol., No 7, 1958, 31451

Author : Petrun'kina, A.M., Dmitriyeva, S.A., Silina, L.I.

Inst :

Title : The Content of Codehydrogenase in Human Blood by Weight of Vitamins B₁ and B₂ and the Influence of Some Agents on the Phosphorylization of Vitamin B₁.

Orig Pub : Vopr. med. khimii, 1956, 2, No 6, 399-408.

Abstract : Healthy persons and those psychologically ill with neurasthenia or organic affliction of the nervous system were observed. Daily weighed doses of vitamins comprised for B₁ 4-6 mg, B₂ 7.5 mg, nicotinic acid 20-30 mg, I 500 m.e. The continuation of the weighing period was different - from 2 to 28 days and more. Repeated introduction of B₁ caused a lowering of the content of codehydrogenase in the blood. The weight of B₂ contributed to the increase of its content; in addition, an increase was noted of the content in

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DMITRIYEVA, S.A.; ZHILINSKAYA, M.A.; PETRUN'KINA, A.M.; CHEREPANOV, P.F.;
CHISTOVICH, A.S.; SHREYBER, Ya.L.

Effect of nicotinic acid intake on the codehydrogenase content of
the blood in neuroses and some psychoses. Trudy Inst.fiziol. 5:
449-457 '56. (MIRA 10:1)

1. Laboratoriya biokhimii pitaniya i pishchevareniya, zaveduyushchaya -
A.M.Petrun'kina. Nervnaya klinika, zaveduyushchaya - N.A.Krushova,
Psikhiatricheskaya klinika, ispolnyayushchiy obyazannosti zaveduyu-
shchego - N.N.Traugott. Psikhiatricheskaya klinika Voenno-morskoy
meditsinskoy akademii, zaveduyushchiy - A.S.Chistovich. Klinicheskaya
nervno-psikhiatricheskaya bol'nitsa Sverdlovskogo rayona, glavnyy
vrach - L.I.Maricheva.

(NICOTINIC ACID) (CODEHYDROGENASES)
(PSYCHOLOGY, PATHOLOGICAL)

PERUN'KINA, A.M.; DMITRIYAN, . . . STENIN, . . .

Most efficient combination of these 3 vitamins remains a question
39-92 J1 1957

1. Iz gruppy ob izucheniya tekhnicheskoy literatury (rukovoditel' A.M. Petrun'kin) Institutu tekhnicheskoy fiziki AN SSSR (diz. - akad. A.M. Prokhorov) (vskazano - 4)

USSR / Human and Animal Physiology (Normal and Pathological).
Metabolism.

T-3

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 60071

Author : Petrunkina, A. M.; Dmitriyeva, S. A.; Silina, L. S.

Inst : Not given

Title : Certain Agents Affecting the Vitamin B₁ Content and Its
Phosphorylation in Man

Orig Pub : Byul. eksperim. biol. i meditsiny, 1957, 43, No 1,
62-66

Abstract : The blood codehydrogenase content was determined in
normal and neurotic patients in repeated (10 - 15 days)
administration of vitamin B₁ (4 - 6 mg daily) or B₂
(7.5 mg. daily), and the changes in the proportion of
the free and phosphorylated form of B₁ in simultaneous
administration of vitamin D (500 I.U. daily) were also
checked. There was some lowering of blood codehydrogenase

Card 1/2

PETRUNIKHA

Role of deficiency in some vitamins in the pathology of the nervous system [with summary in French]. Zhur.nevr. i psikh. 57 no.12: 1482-1486 '57. (MIRA 11:2)

(MENTAL DISORDERS, complications,
vitamin defic. (Rus))
(VITAMIN DEFICIENCY, complications,
ment. disord. (Rus))

DMITRIYBVA, S.A.; PETRUN'KINA, A.M.; SILINA, L.I.

Optimum ratios of some B vitamins. Trudy Inst. fiziol. 7:552-557
'58. (MIRA 12:3)

1. Gruppya po izucheniyyu biokhimiyyi pitaniya (zav. - A.M. Petrun'kina)
Instituta fiziologii im. I.P. Pavlova AN SSSR.
(VITAMIN METABOLISM)

DMITRIYEVA, S.A.; BUDOVSKAYA, L.N.; SILINA, L.I.; MARICHEVA, L.I.; OSIPOVA,
T.A.; SHRAYBER, Ya.L.; PETRUN'KINA, A.M.

Excretion of nicotinic acid derivatives in the urine of patients
with neuroses and cyclothym. Zhur.nevr.i psikh. 61 no.10:1520-
1524 '61. (MIRA 15:11)

1. Gruppya po izucheniy biokhimii pitaniya Instituta fiziologii
AN SSSR imeni I.P.Pavlova i Psikhonevrologicheskaya bol'nitsa
Sverdlovskogo rayona, Leningrad.
(NICOTINIC ACID) (MANIC-DEPRESSIVE PSYCHOSES) (NEUROSES)

DMITRIYEVA, S.A.; KALLINIKOVA, M.N.; PANOV, N.A.; PETRUN'KINA, A.M.;
SILINA, L.I.; TSATSKIS, Ye.N.

Exchange of nitrogen, sulfur, water, and mineral salts in healthy
young males under training conditions. Trudy Inst. fiziol. 9:425-
436 '60. (MIRA 14:3)

1. Gruppya po izucheniya voprosov biokhimii pitaniya (zaveduyushchaya -
A.M.Petrun'kina) Instituta fiziologii im. I.P.Pavlova:
(NITROGEN METABOLISM) (SULFUR IN THE BODY)
(WATER IN THE BODY) (MINERALS IN THE BODY)
(PHYSICAL EDUCATION AND TRAINING)

DMITRIYEVA, S.A.; IVANOVA, A.I.; IVANOVA, Ye.A.; PETRUN'KINA, A.M.;
TSATSKIS, Ye.N.

Influence of hydrogenation of fats on the assimilation of nitrogen,
mineral salts, and fats, and on the amount of unsaturated fatty
acids in the blood and feces. Trudy Inst. fiziol. 9:415-424 '64.
(MIRA 14:3)

1. Gruppa po izucheniya voprosov biokhimii pitaniya (zaveduyushchaya -
A.M. Petrun'kina) Instituta fiziologii im. I.P.Pavlova.
(FAT METABOLISM) (MINERALS IN THE BODY)
(ACIDS, FATTY)

BULOVSKAYA, L.N.; DMITRIYEVA, S.A.; PETRUN'KINA, A.M.; SILINA, L.I.

Effect of nicotinic acid in food on the amount of total nicotinic acid in human blood. Trudy Inst.fiziol. 8:515-519 '59.

(MIRA 13:5)

1. Gruppya po izucheniye voprosov biokhimii pitaniya (zaveduyushchaya - A.M. Petrun'kina) Instituta fiziologii im. I.P. Pavlova AN SSSR.
(NICOTINIC ACID) (BLOOD--ANALYSIS AND CHEMISTRY)

PETRUN'KINA, A.M.

Determining the nicotinic acid in small quantities of the blood
by means of a SF-4 quartz spectrophotometer. Trudy Inst.fiziol.
8:549-556 '59. (MIRA 13:5)

1. Gruppya po izucheniye voprosov biokhimii pitaniya (rukovoditel' -
A.M. Petrun'kina) Instituta fiziologii im. I.P. Pavlova AN SSSR.
(NICOTINIC ACID)

TSEKHOMSKIY, A.M.; PETRUN'KINA, L.M.

Quartz sands of the Zeya-Bureya Depression in the Soviet Far
East. Trudy VSEGEI 57:167-181 '61. (MIRA 15:4)
(Zeya-Bureya Plain--Sand)

PETRUKHINA, M. G.

Aerosol method of fungicide application in fighting mildew.
 A. V. Baranetski and M. G. Petrukhina. *Vinodelia* 3
Vinogradarish 9.5.5.2. 15, No. 4, 48-51 (1955). In con-
 trolled expts., grape leaves and clusters exposed to known
 no. of spores (*Plasmopara viticola* and *Monilia fructigena*)
 were treated with aerosols of 20% Camphenate or of 10%
 of parat. No. 75 in petroleum oil, or with 1% Bordeaux
 soln. (usual hand spraying). All 3 were effective (the latter
 somewhat less) in reducing growth of spores to 2% or less,
 compared with 38.9 and 64.2% growth, resp., in control.
 Bordeaux was as much as 60% less effective than the 2
 former sprays in arresting mildew in grape leaves and clusters.
 A. W. Hale

2

Max

PETRUN'KINA, Ye.M. (Leningrad)

Febrile reaction and changes in oxygen requirements in experimental
rabies in rabbits. Pat. fiziol. i eksp. terap. 5 no.4:43-47 J1-A₂
'61. (MIRA 14:9)

1. Iz otdela obshchey patologii (zav. - chlen-korrespondent AMN
SSSR prof. P.N.Veselkin) Instituta eksperimental'noy meditsiny
AMN SSSR i antirabicheskoy laboratorii (zav. - A.N.Piskareva)
Instituta epidemiologii, mikrobiologii i gigieny imeni Pastera.
(RABIES) (RESPIRATION) (FEVER)

USSR/Man and Animal Physiology. Nervous System.
Higher Nervous System. Behavior.

Abs Jour: Ref Zhur-Biol., No 20, 1958, 93646.

Author : Petrun'kina, Ye. M.

Inst :

Title : Reproducing Fever-Temperature Reaction by Means of
Conditioned Reflexes.

Orig Pub: V sb.: Fiziol. mekhanizmy likhoradochn. reaktsii. L.,
Medgiz, 1957, 254-258.

Abstract: A round-the-clock study of temperature fluctuations in
dogs established the fact that at night the temperature
registers lower than in daytime. Regular fluctuations
of temperature in daytime were not observed. A subcutan-
eous administration of 0.2 ml/kg of D. mesentericus cul-
ture (pyrogenic agent) immediately or even after a long

Card : 1/2

TABOLIN, V.A.; VOL'F, B.S.; MATSULEVA, N.N.; GENKINA, E.M.; ORLOVA,
L.M.; PETRUN'KINA, Z.A.

Features of the course of erythroblastosis fetalis in newborn
infants. Sov. med. 24 no. 7:50-50 J1 '60. (MIRA 13:8)

1. Iz kafedry pediatrii (zav. - prof. G.N. Speranskiy) Tsentral'-
nogo instituta sovershenstvovaniya vrachey i rodil'nogo doma
No. 12 (glavnyy vrach M.M. Repina), Moskva.
(ERYTHROBLASTOSIS FETAL)

NIKHALO, S.M., doktor ekon. nauk, prof.; VOLOBAY, I.V., kand. ekon. nauk; KUGUKALO, I.A. [Kunukalo, I.A.], kand. ekon. nauk; PALANARCHUK, M.M., doktor ekon. nauk, prof.; SLYUSAR, V.D., kand. ekon. nauk; GLADYSHEV, I.S. [Hladyshev, I.S.], st. inzh.-ekonomist; TSYASHCHENKO, P.S., kand. ekon. nauk; PETRUNEVICH, F.G. [Petrunevych, IE.H.], st. inzh.-ekonomist; GRADOV, G.L. [Hradov, H.L.], kand. ekon. nauk; KHAZANET, S.M., red.

[The economic regions of the Ukrainian S.S.R.; a manual] Ekonomichni raiony UkrSR: dovidnyk. Kyiv, Naukova dumka, 1965. 190 p. (MLA 18:5)

1. Sovet po izucheniyu produktivnykh sil Ukrainskoy RSR Gosudarstvennogo planovogo komiteta Ukr. RSR (for all except Khazanet).

PETRUNIN, V.D., fel'dsher

Adhesion of the placenta; an actual case. Fel'd. i akush. 22
no.1:41-42 Ja '57 (MLRA 10:4)

1. Ogorskiy meditsinskiy punkt Kaluzhskoy oblasti.
(PREGNANCY, COMPLICATIONS OF)

S/194/61/000/016/066/082
D271/D301

AUTHORS: Petrun'kin V.Yu., F dorov, N.M. and Iaraylit, A.S.

TITLE: Ferrite phaseshifter for the dm region

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 10, 1961, 55, abstract 10 1332 (Nauchno-tekhn. inform. byul. Leningr. politekhn. in-t, 1960, no. 9, 33-35)

TEXT: Short-circuited sections of co-axial lines, $\lambda/4$ long, filled with ferrite, are used as phaseshifters. Input resistance of these sections depends on the applied magnetic field. A co-axial rectangular bridge is used in the apparatus; free arms of the bridge are loaded with phaseshifters of the type described above. A variation of the resistance of phaseshifters causes a change in the phase-shift between the input and output voltages. The phase-shifter ensures a phase change of 70° when magnetic field varies from 0 to 1000 oersted. Power changes at the phaseshifter output

Card 1/2

Ferrite phaseshifter...

S/194/61/000/010/000/102
D271/D301

are caused by ferrite losses varying with magnetic field; they do not exceed 20%. 2 references. [Abstracter's note: Complete translation]

✓

Card 2/2

9.16/0

00407
S/109/61/006/012/004/020
D266/D305

AUTHORS: Kontorovich, M.I., and Petrun'kin, V.Yu.

TITLE: On the minimum number of control elements in an antenna using electric scanning

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 12, 1961
1982 - 1988

TEXT: The paper is concerned with antennas where scanning is achieved by non-mechanical means. The authors purpose is to determine the minimum number of elements which are necessary for scanning a specified angular region. The authors assume that the total electric field in the far zone can be written in the following form

$$E = \sum_{i=1}^n C_i P_i \quad (14)$$

where P_i - a function of φ and θ represents the radiation pattern

Card 1/3

30429

S/109/61/006/012/004/020

D266/D305

On the minimum number of control ...

of an individual element, φ and θ are the azimuth and elevation angle respectively in a spherical coordinate system, C_1 - constant determined by the excitation of the element, n - number of elements. The P_1 function is assumed to satisfy the orthogonality conditions

$$\int_S P_1(\varphi, \theta) P_k^*(\varphi, \theta) ds = 0, \int_S |P_1(\varphi, \theta)|^2 ds = 1 \quad (1)$$

where P_k^* - complex conjugate of P_k , S - surface of the sphere of unit radius (taken large enough to be in the far zone). The author then proceeds to show that under these assumptions the following inequality is valid

$$D \leq 4\pi \sum_{i=1}^n |P_i|^2 \quad (15)$$

where D - directivity. The equality holds at a special set of the coefficients C_i . Taking now D as a function of φ_0, θ_0 (direction of

Card 2/5

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D266/2305

On the minimum number of control ...

maximum radiation) and integrating again an expression is obtained for the number of elements as follows:

$$n \geq \frac{1}{4\pi} \int_S D ds \quad (16)$$

Finally, the author relaxes the orthogonality condition and states that all the above conclusions are valid even if the P_i functions are not orthogonal. An example is shown for the case when scanning is restricted to one plane. The results obtained agree with those of O.G. Vendik (Ref. 1: Radiotekhnika i elektronika, 1960, v. 5, no. 1, 77) and (Ref. 2: Radiotekhnika i elektronika, 1961, v. 4, no. 1, 64). There are 3 references: 2 Soviet-bloc and 1 non-Soviet bloc. The reference to the English-language publication reads as follows: P.M. Morse and H. Feshbach, Methods of Theoretical Physics, McGraw Hill, New York.

SUBMITTED: April 25, 1961

Card 3/3

S/109/62/007/000-000-000
D266/D303

9,19/2

AUTHORS: Kontorovich, M.I., Petrunkin, V. Yu., Yeseprina, N. A.
and Astrakhan, M.I.

TITLE: Reflection coefficient of plane electromagnetic wave
reflected by a planar wire grating

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 2, 1962.
239 - 249

TEXT: The paper provides some theoretical and experimental data on
the reflection of electromagnetic waves by a set of wires. The phys-
sical arrangement can be seen in Fig. 1: The wires are infinitely
long and have infinite conductivity, the diameter of the wires is
 $2r_0$ placed a distance a from each other. The two different sets (be-
ing rectangular to each other) are separated by a distance l . If
the limitations

$$r_0 \ll a, \quad l \ll a, \quad a \ll \lambda$$

are imposed, then M.I. Kontorovich's approximate boundary condi-
tions can be used (Ref. 1: *Primeneniye metoda usredneniya po ley k*

Card 1/4

Reflection coefficient of plane ...

S/109/62/007/002/114/114
D266/D303

issledovaniyu nekotorykh elektricheskikh sistem (Application of the Field Averaging Method to Study of Some Electrical Problems) Doctoral Thesis, LPI, 1940). Assuming an incident plane wave of arbitrary polarization the authors derive a general formula for the reflection coefficient with the aid of the above boundary conditions. The formula is evaluated for vertical polarization. It contains a parameter χ which represents the coupling between the two sets of wires ($\chi = 0$ for $l = 0$). A numerical example is worked out for $a/r_0 = 50$ and $a/\lambda = 0.25$. The absolute value of the reflection coefficient is plotted against the elevation angle θ , for a number of χ and φ (azimuth angle) values. The reflection coefficient is independent of φ if $\chi = 0$ and independent of χ if $\varphi = 45^\circ$. The authors conclude that if a larger reflection coefficient is to be attained the two sets of wires must not be joined together. If the distance between the wires is comparable with the wavelength the accuracy of the calculations decreases. Experiments were carried out at $\lambda = 3.2$ cm on a 1×1 m² model taking $r_0/\lambda = 1.200$ and $a/\lambda/4$. The experimental results give further confirmation of the theory. There are 4 figures and 3 references: 2 Soviet-Bloc and 1 non-Soviet.

Card 2/4

Reflection coefficient of ...

100%

Corresponding to the reference ...
to ...

Journal ...

Card 1/4

W. YARD,

... ..
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... ..

RODYAKIN, V.V.; GLUKHOV, V.P.; USTINOV, V.S.; ARUTYUNOV, E.A.; PETRUK'KO,
A.N.; TUSHIKOVA, Z.I.; KISELEV, O.G.

The dressing of a block of sponge titanium and completing
marketable batches. TSvet. met, 20 no. 12:67-70 D '65
(MIRA 19:1)

GARMATA, V.A.; USTINOV, V.S.; PETRUN'KO, A.N.; GARBA, N.I.; ARUTYUNOV, E.A.

Design of a reactor for the reduction of titanium tetrachloride.

TSvet. met. 37 no.9:76-77 S '64.

(MIRA 18:7)

L 3499-66 EWT(m)/EPF(c)/EPF(n)-2/EWP(t)/EWP(b) IJP(c) JD
 ACCESSION NR: AP5024859 UR/0136/65/000/010/0067/0070
 669.295

AUTHOR: Rodyakin, V. V.; ^{44.55}Kushkin, B. N.; ^{44.55}Arutyunov, E. A.; ^{44.55}Petrunko, A. N. ³⁸
 B

TITLE: Quality of magnesium-reduced sponge titanium with respect to its residual chlorine content ^{44.55, 27}

SOURCE: Tsvetnyye metally, no. 10, 1965, 67-70

TOPIC TAGS: sponge metal, titanium, chlorine, chlorine compound ✓

ABSTRACT: The effect of the rate of feed of titanium tetrachloride (v_{TiCl_4}) to the reaction vessel on the structure of the resulting Ti sponge is investigated. Three different v_{TiCl_4} were selected: 150, 230, and 320 kg/m²-hr. These encompass the entire range of variations in the feed rate during the process of reduction with liquid Mg. These rates were maintained constant for up to 55, 45, and 40% of the amount of Mg used, respectively, whereupon they dropped to 75-90 kg/m²-hr. Separation was performed at 1020°C for all the three zones over the height of the

Card 1/2

L 3499-66

ACCESSION NR: AP5024859

furnace, whereupon samples of the Ti sponge blocks were analyzed for Cl. Findings: as $\sqrt{TiCl_4}$ increases from 150 to 320 kg/m^2 -hr, the Cl content of the sponge increases, particularly in the bottom of the block. As was to be expected, the content of residual Cl in the upper parts of the blocks is regularly much greater than in the lower parts. On transition from lower to higher rates, however, this difference shrinks and at 320 kg/m^2 -hr it virtually disappears. An investigation of porosity with a special porograph showed that porosity of the sponge increases from 40.8 to 46.3% with increasing rate of reduction, which apparently is the reason for the increase in the content of residual Cl from 0.05 to 0.09% in the sponge. This last may be attributed to the deterioration in the conditions for the evaporation of the chlorides with decreasing size of pores. Orig. art. has: 3 figures, 3 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, GC

NO REF SOV: 001

OTHER: 001

Card

212 DP

SANDLER, R.A.; STRELETS, Kh.L.; GARMATA, V.A.; RODYAKIN, V.V.; ARUTYUNOV, F.A.,
PETRUN'KO, A.N.; SOKOLOV, I.I.; Prinsipal'nyye uchastnye: USTINOV, V.S.;
KITELEV, G.G.; PEREPICHAY, A.G.; MARICHEV, A.A.; YETIKEYEVA, I.B.
SMOL'SKIY, I.Ya.; GOLOV, A.G.

Effect of the rate of feeding titanium tetrachloride into the reactor
on the indices of the magnesium thermic reduction process. TSvet. met.
37 no.10:58-60 G 164.
(MIRA 1974)

1 16312-65 EWT(m)/EWP(t)/EWP(b) IJP(c)/ASD(f)-2/ASD(m)-3 JD
 ACCESSION NR: AP5002053 8/0136/64/000/009/0076/0077

AUTHOR: Garmata, V. A.; Ustinov, V. S.; Petrun'ko, A. N.; Garba, N. I.; Arutyunov, E. A.

TITLE: Design of reaction vessel for reduction of titanium tetrachloride

SOURCE: Tavetnyye metally, no. 9, 1964, 76-77

TOPIC TAGS: titanium, reduction, titanium compound, metal industry

Abstract: One of the main drawbacks of reduction reactors used in the industrial production of sponge titanium by the magnesiothermic method has been the inadequacy of the design of the upper part of the reactors. The presence of relatively cool zone in the upper part caused the formation of large amounts of lower chlorides which lowers the quality of the sponge titanium and the utilization factor of titanium tetrachloride and magnesium. After reviewing work done between 1959 and 1962 on the improvement of industrial reduction reactors, the authors describe the most successful design of a heated, inverted conical cover for such reactors, and illustrate it with a diagram.

Testing of the conical covers showed that they should be made of heat- and acid-resistant steel, since after each process the cover should be washed with an 8-12% HCl solution. Orig. art. has 1 figure.

Card 1/2

L 16312-65
ACCESSION NR: AP5002053

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: NM

NO REF SOV: 000

OTHER: 000

JPRS

Card 2/2

LUKASHENKO, E.Ye.; KRAMNIK, V.Yu.; GARMATA, V.A.; SERGIYENKO, S.N.;
Prinimali uchastiye: KARGIN, V.M., inzh.; KISELEV, G.G., inzh.;
PETRUN'KO, A.N., inzh.; MASLENNIKOV, I.P., inzh.

Developing and mastering the method of thermochemical reduction of
titanium tetrachloride by magnesium in retorts without inserted
reaction sleeves. Titan i ego splavy no.6:23-26 '61. (MIRA 14:11)
(Titanium--Metallurgy)

EXCERPTA MEDICA Sec 17 Vol 5/4 Public Health Apr 59

1234. A CASE OF BENIGN LEPTOSPIROSIS IN SOFIA (Bulgarian text) -

Peternov, A. and Daskov, G., Chair for Prop. of Intern. Med., Super.
Med. Inst., Sofia - SAVR.MED. 1957, 8: 8 (103-195)

The first sporadic cases of this disease in Bulgaria were recorded in the years 1950 and 1951 after there had been some epidemic outbreaks. A description is given of the only case reported in Sofia, it occurred in 1956 in a boy aged 14 yr. who became ill 5 days after he had bathed in a public swimming pool in the city. The diagnosis was made on the basis of the serological findings. It is stressed that public swimming pools for summer use should be disinfected as a preventive measure against this disease.

Karajvanov - Sofia (L, 17)

POLAND

ANDREJEW, I.; PETRENKO, B.; and BPISANTOWA, T.; Institute of Epidemiology and Mikrobiology [original version of affiliation not shown]; Head (Director)
Dr S. KANGELOVA, Sofia, Bulgaria.

"Use of Salmonella typhi Allergen to Determine Vaccination Immunity."

Warsaw, Medycyna Doswiadczalna i Mikrobiologia, Vol 18, No 1, 1966; pp 47-54.

Abstract [and ish summary modified] : Study of allergen prepared from heat-killed Salmonella typhi, with tests in 112 previously unvaccinated and 169 vaccinated persons. All tests indicated that the allergen is a very effective vaccine or vaccine effectiveness detector. Graph, 5 tables; 5 Western and 7 Soviet references.

1/1

IONKOV, Iv.; STANCHEV, Al.; DOSKOV, Iv. SHISHMANOVA, Iul.; ATANASOV, E.;
MATEV, M.; PANEVA M.; NIKOLOV, St.. PETRUNOV, St.; NIKOLOV, N.

The development of Bulgarian internal medicine from 9 September
1944. Suvrem med., Sofia no.6:106-114 '60.
(HISTORY OF MEDICINE)

PETRUNOV, St.; PAVLOV, K.

A case of echinococcosis of the left kidney passed through the peritoneum into the abdomined cavity associated with sarcoma of the same kidney. Suvrem.med., Sofia no.12:116-119 '59.

1. Iz Minnata bolnitsa - Dimitrovo. Gl.lekar: St.Petrunov.
(ECHINOCCOSIS compl.)
(SARCOMA compl.)
(KIDNEY DISEASES compl.)
(KIDNEYS neopl.)

PETRUNOV, St.

Treatment of hypertension and some kidney diseases with pectin.
Nauch. tr. vissh. med. inst. Sofia 40 no.3:241-248 '61.

1. Predstavena ot prof. Iv. Ionkov - rukovoditel na Katedrata po pro-
pedevtika na vutreshnite bolesti.

(PECTINS ther) (KIDNEYS DISEASES ther)
(HYPERTENSION ther)

IONKOV, Iv.; TSOLOV, R.; DOSKOV, I.; SHISHMANOVA, Iul.; ANDREEV, I.;
NIKOLOV, St.; SUKIASIAN, Kh.; MATEV, M.; ATANASOV, E.;
TODOROV, B.; STEFANOVA, A.; PETRUNOV, St.; TSVETKOV, D.;
ORESHKOV, V.; SIMEONOV, S.; PATARINSKI, D.; AVRAMOVA, N.;
MALCHEV, Kh.

Biochemical changes in patients with influenza during the
1959 epidemic. Nauch. tr. vissh. med. inst. Sofia 41 no.7:
9-14 '62.

1. Predstavena ot prof. I. Ionkov.
(INFLUENZA) (GAMMA GLOBULIN) (IRON METABOLISM)
(BILIRUBIN) (BICARBONATES) (BLOOD CHOLESTEROL)
(UREA) (BLOOD SUGAR) (PROTEIN METABOLISM)
(POTASSIUM) (BLOOD PROTEINS) (SODIUM)
(17-KETOSTEROIDS) (SODIUM CHLORIDE)

KIRCHEVA, S.; IVANOVA, Ye.; TODOROV, T.; MIKHAYLOV, St.; GUDZHEVA, V.;
POPOV, R.; PETRUNOV, V.; ILIYEVA, P. (Bulgaria)

Effect of nivaline electrophoresis in some diseases of the
nervous system. Vop.kur., fizioter.i lech.fiz.kul't. 28
no.1:26-30 '63. (MIRA 16:4)

1. Iz Nauchno-issledovatel'skogo instituta kurortologii i
fizioterapii v Sofii - Ovcha Kupel (dir. - dotsent K.Kirchev).
(NERVOUS SYSTEM DISEASES) (ELECTROPHORESIS) (GALANTHAMINE)

PETRUNOVA, Vetka, bibliotekarka

Technical books aiding production and the rationalization
movement. Rationalizatsiya. No. 3-15-17. Vol.

1. Automobile Repair Plant, Leningrad Station.

ZAYTSEV, P.I.; LIZOGUB, I.G.; PETRUKOVICH, A.A., zasl. inzh. nauch. i tekhn. nauch. SSSR, SHTEN, Ya.Y., CHIRIKOV, A.I.;
YAKUSOV, S.I., ANDREYEV, G.Y., zasl. inzh. nauch. i tekhn. nauch. SSSR, GRECHUK, V.S., zasl. inzh. nauch. i tekhn. nauch. SSSR, retiree; LUKHAY, V.T., zasl. inzh. nauch. i tekhn. nauch. SSSR, retiree.

[Mechanization of the assembly, laying and exchange of switches] Mekhanizatsiya sborki, ukladyvaniya i smeny strelkovykh i nakhodnykh. Minsk: Vysshaya shkola, 1974. 64 p. (MIRA 12:3)

1. Leningradskiy inzh. nauch. institut imeniya zhukovskogo (for transport), kafedra "Zhukovskiy put" (for Andreyev, Grechuk)

L 44712-65 EWT(m)/EWP(w)/EWA(a)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c)

Pf-4/Pad IJP(c) JD/HW

ACCESSION NR: AT5008870

S/2601/64/000/020/0042/0051

AUTHOR: Kozvrskiy, G. Ya.; Okrainets, P.N.; Petrinin, G.A.

TITLE: Characteristics of nickel structures with high creep resistance

SOURCE: AN UkrSSR, Institut metallofiziki. Sbornik nauchnykh trudov, no. 20, 1964.
Voprosy fiziki metallov i metallovedeniya (Problems in the physics of metals and physical metallurgy), 42-51

TOPIC TAGS: nickel structure, creep resistance, nickel creep, nickel heat treatment,
plastic deformation, strain hardening

ABSTRACT: The aim of this study was twofold: (1) to study the change in the structure of nickel during creep at 700C from the original state after high-temperature annealing, and (2) to study the change in structure after a preliminary cold deformation and its influence on the structural changes in subsequent creep tests, since such data are necessary for the determination of the nature of structural states which promote an increase in deformation resistance and in the life of metals during creep. Both sets of nickel samples were examined by x-ray diffraction in their original state (annealing at 1100C for 3 hrs). The data show that the influence of preliminary cold deformation on

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ACCESSION NR: AT5008870

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the main creep characteristics observed in mechanical creep tests is determined by the difference in the original structural states. Data on the disorientation and fragmentation in the grains indicate that cold plastic deformation is distributed more uniformly in polycrystals than hot deformation, particularly in creep. The optimum substructure is characterized by the greatest possible hardening which does not cause the development of recrystallization in the course of creep tests. The initial substructure of the metal determines the substructure of the steady stage of creep and thus the deformation rate and the duration of this stage. Orig. art. has: 9 figures and 1 table.

ASSOCIATION: Institut metallofiziki, AN Ukr SSR (Institute of the Physics of Metals, AN UkrSSR)

SUBMITTED: 25Mar64

ENCL: 00

SUB CODE: MM

NO REF SOV: 008

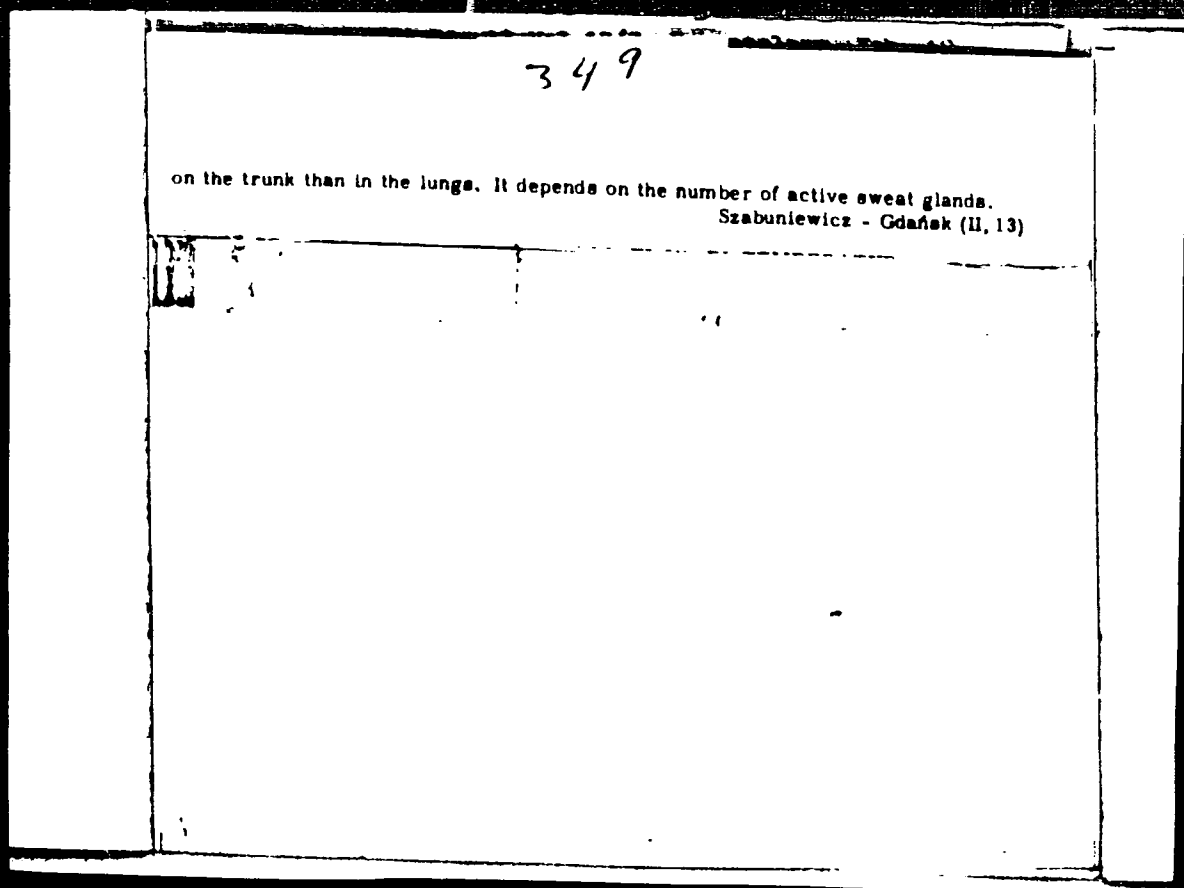
OTHER: 002

mod.
Card 2/2

EXCERPTA MEDICA Sec 13 Vol 13/2 Dermatology Feb 59

349. SOME PECULIAR FEATURES IN THE CUTANEOUS RESPIRATION OF MAN ACCORDING TO THE SKIN AREA (Russian text) - Petrunj N. M. - DOKLADY AKAD. NAUK SSSR 1957, 114/4 (904-907) Tables 1 Illus. 1

Gas exchange was investigated by means of an apparatus attached to the skin. In this apparatus a steady circulation of air, passing through filters, was maintained. Oxygen uptake (in men and women, lying still at room temperature 21-25°) was 28.9-124.65 ml./hr./sq.m.; CO₂ output was 28.74-126.52 ml./hr./sq.m. It was greatest in the abdominal region and on the back (about 120 ml./hr.), less on the chest (about 108 ml./hr.) and the sacral region (about 98 ml./hr.), still less on the thigh (78 ml./hr.), on the fore-arm (39 ml./hr.) and on the skin and foot (30 ml./hr.). Women have a greater gas exchange than men. The respiratory quotient was always near 1. Calculated for 1 sq.m., the gas exchange was greater



RETHINKING

RETHINKING
RETHINKING

PETRUNIN, V.I.; VOROGUSHIN, M.F.

Limiting the density of electron clusters by a space charge
in the multipaction effect. Elektrofiz. pp. no.2:25-30 '64.
(MIRA 18:3)

KOVAL'SKIY, V.V.; PATRUNKIN, N.S.

Geographical ecology and evolution by variability of the
Dokl. AN SSSR 1979 no.5:1175-1178 3 p. 1979

1. Institut geokhimi i analiticheskoy khimii im. V.I. Vernadskogo
AN SSSR. Predstavleno akademikom N.I. Ogar'kovym.

NIKOL'SKIY, O.G., inzh.; PETRUNYA, A.G., inzh.

Hermetic sealing of ship holds. Sudostroenie 27 no.6:57-59
Je '61. (MIRA 14:6)

(Bulkheads(Naval architecture))

L 15289-65 AND

ACCESSION NR: ARH045867

S/0299/64/000/014/M023/M023

SOURCE: Ref. zh. Biologiya. Svochnyy tom, Abs. 14M154

AUTHOR: Petrunya, M. S.

TITLE: Histomorphological characteristics of transplant accretion
with full layered cornea transplantation

CITED SOURCE: Sb. 3 Vses. konferentsiya po peresadke tkaney i
organov, 1963. Yerevan, 1963, 414-415

TOPIC TAGS: accretion, cornea, transplantation

TRANSLATION: Transplants were investigated histologically in 23 patients after receiving full layered cornea transplants. Seven transplants were cloudy, 5 transplants were partially translucent, and 11 transplants were translucent. In the cases of cloudy accretion and partially translucent transplants, connective tissue elements grew into the stroma, Bowman's membrane was not preserved, and corneal epithelium was replaced by conjunctival epithelium or by mucous lip epithelium if the transplant was taken from mucous lip

Card 1/2

1.15289-83
ACCESSION NR: AR4045867

epithelium. In translucent transplants, Bowman's membrane was preserved, transplant stroma resembled the cornea stroma, and the cornea lamina of the transplant directly adhered to the deep layer lamina of the recipient's cornea, that is, true accretion of the cornea transplant took place.

SUB CODE: IS

ENCL: 00

Card 2/2

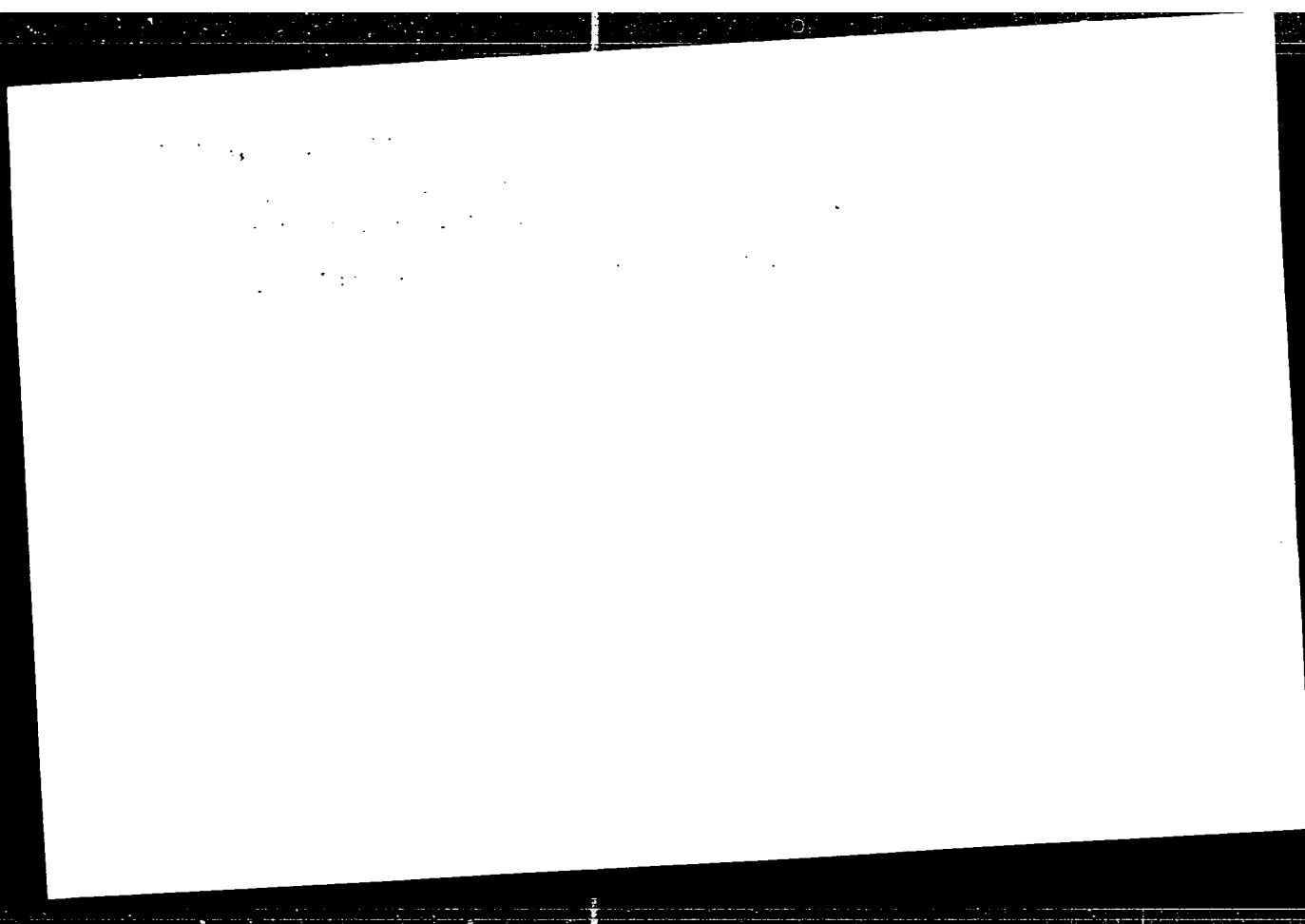
PETRUNYA, M.S., nauchnyy soimadnik

Effectiveness of total lamellar corneal transplantation.
(MIRA 1704)
Oft. zhur. 18 no. 40200-205 1964

1. Iz Ukrainskogo nauchno-issledovatel'skogo eksperimental'nogo
instituta glaznykh bolezney i lasevoy terapii imeni akademika
V.P. Filatova.

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240620016-9



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CIA-RDP86-00513R001240620016-9"

PETRUNYA, S.P. (Ingansk)

New method of transplant fixation in partial penetrating corneal
grafting. Oft. zhur. 17 no. 7:406-409 '62. (MIRA 16:3)
(CORNEA—TRANSPLANTATION)

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"Transplantation of the cornea in cataract complications" by
N.A.Puchkovskaia. Reviewed by S.P. Petrunia. Oft. zhur. 16 no. 7.
439-441 '61. (MIA 12:11)

1. Oblastnoy okulist Luganskoy oblasti.
(CORNEAL TRANSPLANTATION) (CATARACT)

PETRUNYA, S.P., kand.med.nauk; SOKOLIK, E.Ye., ordinator

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'61. (MIRA 14:10)

1. Iz Luganskoy oblastnoy klinicheskoy bol'nitsy.
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 DANKOYEVA, T.N.; DENISOVA, A.G.; DOLGOVA, M.P.; IVANOV, N.A.; ISHCHENKO,
 I.N.; KATS, V.A.; KOLOMIYCHENKO, M.I.; LAVRIK, S.S.; LIMAREV, A.A.;
 NAZAROVA, N.G.; NOVACHENKO, N.P.; ~~PEREDKOVA, S.P.~~; PEKAKADZE, A.L.;
 RUDENKO, F.A.; SERGIYEVSKIY, V.F.; TAYTSLIN, I.S.; TARTAKOVSKIY, B.S.;
 CHIZHONOK, P.I.; SHALABALA, M.P.; SHUMADA, I.V.; SHUPIK, P.L.

Konstantin Konstantinovich Skvortsov; obituary. Nov.khir.arkh.
 no.3:142-143 My-Je '59. (MIRA 12:10)
 (SKVORTSOV, KONSTANTIN KONSTANTINOVICH, 1871-1959)

PETRUNYA, S., kand.med.nauk, zaslužennyy vrach USSR; BOKAREVA, M.

Report of the Lugansk Ophthalmological Society for 1958. Oft.
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1. Predsedatel' pravleniya Luganskogo oftal'mologicheskogo obshchestva glaznykh vrachey za 1958 god (for Petrunya).
 2. Sekretar' Luganskogo oftal'mologicheskogo obshchestva glaznykh vrachey za 1958 god (for Bokareva).
- (LUGANSK--OPHTHALMOLOGICAL SOCIETIES)

PETRUNYA, S.P., kand.med.nauk; DUGEL'NAYA, L.P., ordinator (Voroshilovgrad)

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surg.)

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Results of surgery in separation of the retina. Oft.shur. 13 no.
1:54-58 '58. (MIRA 11:4)

1. Iz Voroshilovgradskoy oblastnoy bol'nitsy.
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PETHUNYA, S.P., kand.med.nauk

Retransplantation of the cornea. Oft.shur. 14 no.8:477-485 '59.
(MIRA 13:4)

1. Iz Luganskoy oblastnoy bol'nitsy.
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10/10/57
PETRUNYA, S.P.

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70 no.6:43-44 N-D '57. (MIRA 11:1)
(CHILDREN, BLIND) (VIL'NITSKAIA, D.G.)
(PIL'MAN, N.I.)